SEQUENCE LISTING

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<120> HUMANIZED ANTIBODIES AGAINST VASCULAR ENDOTHELIAL GROWTH FACTOR

<130> 26050-709.501

<150> US 60/284,407
<151> 2001-04-17

<150> US 10/125,687
<151> 2002-04-17

<150> US 10/153,176
<151> 2002-05-20

<150> US 10/443,134
<151> 2003-05-20

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<170> PatentIn version 3.1

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 2

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Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile
        35   40   45

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```
Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly
    50              55              60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70              75              80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85              90              95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100             105
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<210> 3

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<400> 3

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Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly
1               5               10              15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20              25              30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Val Leu Ile
        35              40              45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly
    50              55              60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65              70              75              80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85              90              95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100             105
```

<210> 4

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<400> 4

```
Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly
1               5                   10                  15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20                  25                  30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile
        35                  40                  45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala
65                  70                  75                  80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 5

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<400> 5

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Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Leu Gly
1               5                   10                  15
```

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65   70   75   80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
            85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 6

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<400> 6

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1   5   10   15

Glu Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
            85   90   95

```
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100               105
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<400> 7

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Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1               5               10                  15

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20              25                  30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Ser Leu Leu Val
        35                  40                  45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala
65                  70                  75                  80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100               105
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<400> 8

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1   5   10   15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65   70   75   80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

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<400> 9

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
Page 7

65   70   75   80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 10

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<400> 10

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
                20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile
            35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
        50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro
65   70   75   80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 11

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<400> 11

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile
        35   40   45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
            85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 12

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<400> 12

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Leu Gly
1   5   10   15

Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20   25   30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Val Leu Ile
        35   40   45

```
Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala
65                  70                  75                  80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 13

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<400> 13

```
Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1               5                   10                  15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
                20                  25                  30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
            35                  40                  45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65                  70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105
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<400>  14

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ala Gly
1               5                   10                  15


Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
            20                  25                  30


Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile
        35                  40                  45


Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60


Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80


Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
                85                  90                  95


Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100                 105

<210>  15

<211>  107

<212>  PRT

<213>  Artificial Sequence


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<223>  VL

<400>  15

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Arg Ala Thr Ile Ser Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr
```

```
                20                      25                      30
```

```
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile
        35                  40                  45
```

```
Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly
    50                  55                  60
```

```
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
```

```
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Lys Pro Trp
                85                  90                  95
```

```
Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 16

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<400> 16

```
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1               5                   10                  15
```

```
Glu Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr
            20                  25                  30
```

```
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile
        35                  40                  45
```

```
Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50                  55                  60
```

```
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
```

```
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Ser Pro Trp
                85                  90                  95
```

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 17

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<400> 17

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Gly Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 18

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<400> 18

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Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Gly Thr Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
            85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
        100   105

<210>   19

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<212>   PRT

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<400>   19

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
        35   40   45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Tyr
                    85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 20

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<400> 20

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile
        35   40   45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Gly Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 21

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<400>   21

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile
            35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210>   22

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<400>   22

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
            35   40   45

```
Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly
    50              55                  60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 23

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<400> 23

```
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1               5                   10                  15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr
                20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
            35                  40                  45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50              55                  60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Val Ala Ile Lys
            100                 105
```

<210> 24

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<400> 24

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
            35   40   45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
                100   105

<210> 25

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<400> 25

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Ser Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 26

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<400> 26

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

<210> 27

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<223> VL

<400> 27

```
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1               5                   10                  15


Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Ser Thr Tyr
            20                  25                  30


Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile
        35                  40                  45


Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50                  55                  60


Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80


Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp
                85                  90                  95


Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 28

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<213> Artificial Sequence

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<400> 28

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Ser Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
            85   90   95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
            100   105

<210>   29

<211>   107

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<400>   29

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Leu Leu Ile
        35   40   45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly
    50   55   60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

```
Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp
                85              90              95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100             105
```

<210> 30

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<212> PRT

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<400> 30

```
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1               5               10              15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr
            20              25              30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile
        35              40              45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly
    50              55              60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70              75              80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Ala Pro Trp
                85              90              95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100             105
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<210> 31

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<400> 31

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile
            35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 32

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 32

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile
            35   40   45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly

```
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 33

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 33

```
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1               5                   10                  15

Glu Arg Ala Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile
        35                  40                  45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50                  55                  60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp
                85                  90                  95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100                 105
```

<210> 34

<211> 107

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VL

<400>   34

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Gly Thr Tyr
            20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile
        35   40   45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala
65   70   75   80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp
            85   90   95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100   105

<210>   35

<211>   107

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VL

<400>   35

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1   5   10   15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

```
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile
        35              40              45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly
    50              55              60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70              75              80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp
                85              90              95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
            100             105
```

<210> 36

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 36

```
Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
1               5               10              15

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Gln Ala Ile Arg Asn Asp
            20              25              30

Leu Thr Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile
        35              40              45

Tyr Gly Ala Thr Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50              55              60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65              70              75              80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Thr Thr Pro Trp
                85              90              95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
            100             105
```

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<210> 37

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 37

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Thr Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile
            35   40   45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
            100   105

<210> 38

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 38

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly

```
1                   5                   10                  15

Asp Arg Val Ala Ile Thr Cys Arg Ala Ser Arg Asp Ile Thr Thr Asp
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Leu Leu Ile
            35                  40                  45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
                100                 105
```

<210> 39

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 39

```
Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1                   5                   10                  15

Asp Arg Ile Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asp Asp
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile
            35                  40                  45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80
```

Page 28

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 40

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 40

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 41

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223>   VL

<400>   41

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ala Ile Tyr Asp Tyr
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
            35   40   45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
            100   105

<210>   42

<211>   107

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VL

<400>   42

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Lys Asp
                20   25   30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Ile Ala Pro Lys Val Leu Ile
            35   40   45

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Pro Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100   105

<210> 43

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 43

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1   5   10   15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr
            20   25   30

Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
        35   40   45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly
    50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
            100   105

<210> 44

<211> 107

<212> PRT

<div align="center">Page 31</div>

<213> Artificial Sequence

<220>

<223> VL

<400> 44

```
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1               5                   10                  15

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp
            20                  25                  30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
            35                  40                  45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
    50                  55                  60

Thr Gly Ser Gly Thr Asp Phe Ala Leu Thr Ile Ser Ser Leu Gln Pro
65                  70                  75                  80

Glu Asp Ser Ala Ser Tyr Tyr Cys Gln Gln Ser Tyr Thr Ile Pro Trp
                85                  90                  95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
            100                 105
```

<210> 45

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 45

```
Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1               5                   10                  15

Asp Thr Ile Thr Ile Ser Cys Arg Ser Ser Gln Pro Ile Thr Asn Asp
            20                  25                  30
```

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile
        35   40   45

Tyr Ala Ala Ser Arg Leu Gln Gly Gly Val Pro Ser Arg Phe Ser Gly
        50   55   60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65   70   75   80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp
                85   90   95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
                100   105

<210> 46

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 46

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn
                20   25   30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
        35   40   45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Leu Ser
        50   55   60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Leu
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu
                85   90   95

Thr Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
                100   105   110

<210> 47

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 47

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Tyr Ser Asn Ile Gly Ser Asn
                20   25   30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Val Leu
            35   40   45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
        50   55   60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
                85   90   95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
                100   105   110

<210> 48

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 48

Asn Phe Met Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
1   5   10   15

```
Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn
            20              25              30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu
        35              40              45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser
    50              55              60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65              70              75              80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
            85              90              95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
            100             105             110
```

<210> 49

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 49

```
Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1           5               10              15

Ser Val Thr Ile Ser Cys Ser Gly Thr Thr Ser Asn Ile Gly Ser Asn
            20              25              30

Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu
        35              40              45

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    50              55              60

Gly Ser Arg Ser Ala Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65              70              75              80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
```

Ser Gly Tyr Val Phe Gly Ala Gly Thr Gln Leu Thr Val Leu
            100   105   110

<210> 50

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 50

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
                20   25   30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu
            35   40   45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    50   55   60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
                85   90   95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
            100   105   110

<210> 51

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223>   VL

<400>   51

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Val Gly Arg Asn
            20   25   30

Thr Val Asn Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Phe Leu
        35   40   45

Met Tyr Gly Asn Asp Glu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    50   55   60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu
            85   90   95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
            100   105   110

<210>   52

<211>   110

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VL

<400>   52

Gln Pro Val Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn
            20   25   30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu
        35   40   45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser
    50   55   60

Page 37

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
                85   90   95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
            100   105   110

<210> 53

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 53

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Ser Gly Ser Asn Ser Asn Ile Gly Ser Asn
            20   25   30

Asn Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Val Leu
        35   40   45

Ile Tyr Gly Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    50   55   60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln
65   70   75   80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Gly Ala Trp Asp Asp Ser Leu
                85   90   95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
            100   105   110

<210> 54

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> VL

<400> 54

Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
1   5   10   15

Arg Val Thr Ile Ser Cys Thr Gly Arg Ser Ser Asn Ile Gly Ala Gly
            20   25   30

His Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu
        35   40   45

Leu Ile Tyr Ala Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe
    50   55   60

Ser Asp Ser Lys Ser Gly Thr Ser Ala Ser Leu Gly Ile Ser Gly Leu
65   70   75   80

Arg Ser Glu Asp Glu Ala Asp Tyr Phe Cys Ala Thr Trp Asp Asp Ser
                85   90   95

Leu His Gly Tyr Val Phe Gly Thr Gly Thr Lys Val Thr Val Leu
                100   105   110

<210> 55

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

         35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 56

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 56

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 57

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 57

Glu Gly Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 58

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Gln Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Ala Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 59

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 59

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

```
Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50              55              60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr
65              70              75              80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 60

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 60

```
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Arg Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
        20              25              30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50              55              60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75              80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
```

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 61

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 61

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 62

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 62

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ala Leu Asp His Phe
            20   25   30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 63

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 63

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Tyr Asn Tyr
            20   25   30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe
        50   55   60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 64

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 64

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Leu Asp His Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
        50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

```
Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100                 105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115                 120
```

<210> 65

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 65

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20                  25                  30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50                  55                  60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr
65                  70                  75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100                 105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115                 120
```

<210> 66

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 66

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 67

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 67

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10                      15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20              25              30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50              55              60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75                      80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 68

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 68

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10                      15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20              25              30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50              55              60
```

Lys Arg Arg Val Thr Phe Ser Leu Asn Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 69

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 69

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 70

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 70

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 71

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

Page 51

<400> 71

```
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20              25              30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50              55              60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Ala Tyr
65              70              75              80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
        100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 72

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 72

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr
            20              25              30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45
```

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210>   73

<211>   123

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH

<400>   73

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
          115   120

<210> 74

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 74

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
          20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
              100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
          115   120

<210> 75

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 75

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 76

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 76

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

                         35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Val Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 77

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 77

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Lys Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 78

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 78

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Ala Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Leu Thr Phe Ser Leu Asp Asn Ser Lys Asn Pro Pro Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 79

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 79

```
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20                  25                  30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50                  55                  60

Lys Arg Arg Val Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr
65                  70                  75                  80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100                 105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115                 120
```

<210> 80

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 80

```
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20                  25                  30
```

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
              85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
              100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
          115   120

<210> 81

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 81

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
          20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

                    85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 82

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 82

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 83

<211> 123

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH

<400>   83

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
                20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210>   84

<211>   123

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH

<400>   84

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
        20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
    35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
        100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 85

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 85

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly Ser
1   5   10   15

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr His Tyr Gly
        20   25   30

Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val Gly
    35   40   45

Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Glu Phe Lys
    50   55   60

Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu
65   70   75   80

```
Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
            85              90                  95

Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val Trp
            100             105                 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 86

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 86

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Thr His Tyr
            20              25                  30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
        35              40                  45

Gly Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe
    50              55                  60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 87

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 87

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr
            20   25   30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 88

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 88

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr
            20              25              30

Gly Val Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe
    50              55              60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75              80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
        100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 89

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 89

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala Ser Phe
            20              25              30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe
    50              55              60
```

```
Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75              80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 90

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 90

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5               10              15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asp His Phe
            20              25              30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
        35              40              45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe
    50              55              60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75              80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85              90              95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 91

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 91

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asn Asn Tyr
                20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe
        50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 92

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 92

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe
            20   25   30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
        100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
    115   120

<210> 93

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 93

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe
            20   25   30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
        35   40   45

```
Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe
    50              55                  60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70                  75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85                  90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 94

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 94

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser Asn Tyr
            20                  25                  30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
        35                  40                  45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe
    50              55                  60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70                  75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
            85                  90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105                 110
```

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 95

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 95

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr
            20   25   30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe
    50   55   60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 96

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223>   VH

<400>   96

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr His Tyr
                20   25   30

Gly Val Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
            35   40   45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Gln Glu Phe
        50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210>   97

<211>   123

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH

<400>   97

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr Ser Tyr
                20   25   30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Glu Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 98

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 98

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Phe Asp His Tyr
            20   25   30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe
    50   55   60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
         100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 99

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 99

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
        20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
   50   55   60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
        85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
        100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 100

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 100

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 101

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 101

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
          50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                  85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
              100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
              115   120

<210>   102

<211>   123

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH

<400>   102

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
              20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
          35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
          50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 103

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 103

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 104

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 104

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
            20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
    50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115   120

<210> 105

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 105

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr
                20   25   30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
        50   55   60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 106

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 106

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1   5   10   15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe
                20   25   30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
            35   40   45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Asp Phe
        50   55   60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

```
Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85              90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
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<210> 107

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 107

```
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1               5               10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Leu Ser His Tyr
            20              25              30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
        35              40                  45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Asp Phe
    50              55                  60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65              70              75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85              90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100             105             110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115             120
```

<210> 108

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 108

```
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15


Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe
            20                  25                  30


Gly Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
        35                  40                  45


Gly Trp Ile Asn Thr Tyr Asn Gly Glu Thr Thr Tyr Ala Pro Asp Phe
    50                  55                  60


Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65                  70                  75                  80


Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95


Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100                 105                 110


Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115                 120
```

<210> 109

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 109

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe
                20                  25                  30

Gly Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
            35                  40                  45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Glu Phe
        50                  55                  60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65                  70                  75                  80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85                  90                  95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100                 105                 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
            115                 120
```

<210> 110

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> VH

<400> 110

```
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1               5                   10                  15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe
                20                  25                  30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
            35                  40                  45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe
        50                  55                  60
```

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
65   70   75   80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85   90   95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
            100   105   110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115   120

<210> 111

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 111

Gly Phe Asp Phe Thr Asn Tyr Gly Met Asn
1   5   10

<210> 112

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 112

Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
1   5   10

<210> 113

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 113

Gly Tyr Ser Leu Asp His Tyr Gly Met Asn
1   5   10

<210> 114

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 114

Gly Tyr Ala Leu Asp His Phe Gly Leu Asn
1   5   10

<210> 115

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 115

Gly Tyr Asp Phe Tyr Asn Tyr Gly Ile Asn
1   5   10

<210> 116

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 116

Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
1   5   10

<210> 117

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 117

Gly Tyr Ser Phe Asp His Tyr Gly Leu Asn
1   5   10

<210> 118

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 118

Gly Tyr Asp Phe Ser Asn Tyr Gly Leu Asn
1   5   10

<210> 119

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223>   VH/CDR1

<400>   119

Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
1   5   10

<210>   120

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   120

Gly Tyr Asp Phe Ala His Tyr Gly Val Asn
1   5   10

<210>   121

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   121

Gly Tyr Asp Phe Asp His Phe Gly Ile Asn
1   5   10

<210>   122

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   122

Gly Tyr Asp Phe Asn Asn Tyr Gly Met Asn
1   5   10

<210>   123

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   123

Gly Tyr Asp Phe Ala Ser Phe Gly Ile Asn
1   5   10

<210>   124

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   124

Gly Phe Asn Phe Thr His Tyr Gly Ile Asn
1   5   10

<210>   125

<211>   10

<212>   PRT

<213>   Artificial Sequence

<220>

<223>   VH/CDR1

<400>   125

Gly Tyr Asp Phe Ala His Tyr Gly Leu Asn
1   5   10

<210> 126

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 126

Gly Tyr Asn Phe Tyr His Tyr Gly Val Asn
1   5   10

<210> 127

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 127

Gly Tyr Asp Phe Thr His Tyr Gly Leu Asn
1   5   10

<210> 128

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 128

Gly Tyr Asn Phe Tyr Ser Tyr Gly Leu Asn
1   5   10

<210> 129

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 129

Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
1   5   10

<210> 130

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 130

Gly Tyr Thr Phe Thr His Tyr Gly Leu Asn
1   5   10

<210> 131

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 131

Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
1   5   10

<210> 132

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 132

Gly Tyr Asp Leu Ser His Tyr Gly Leu Asn
1   5   10

<210> 133

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 133

Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
1   5   10

<210> 134

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 134

Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
1   5   10

<210> 135

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR1

<400> 135

Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
1   5   10

<210> 136

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 136

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe Thr
1   5   10   15

Arg

<210> 137

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 137

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe Thr
1   5   10   15

Arg

<210> 138

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 138

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe Thr
1   5   10   15

Arg

<210> 139

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 139

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe Thr
1   5   10   15

Arg

<210> 140

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 140

Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe Lys

1   5   10   15

Arg

<210> 141

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 141

Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe Lys
1   5   10   15

Arg

<210> 142

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 142

Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe Lys
1   5   10   15

Arg

<210> 143

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 143

Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe Lys
1   5   10   15

Arg

<210> 144

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 144

Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe Lys
1   5   10   15

Arg

<210> 145

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 145

Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe Lys
1   5   10   15

Arg

<210> 146

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> VH/CDR2

<400> 146

Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe Lys
1   5   10   15

Arg

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